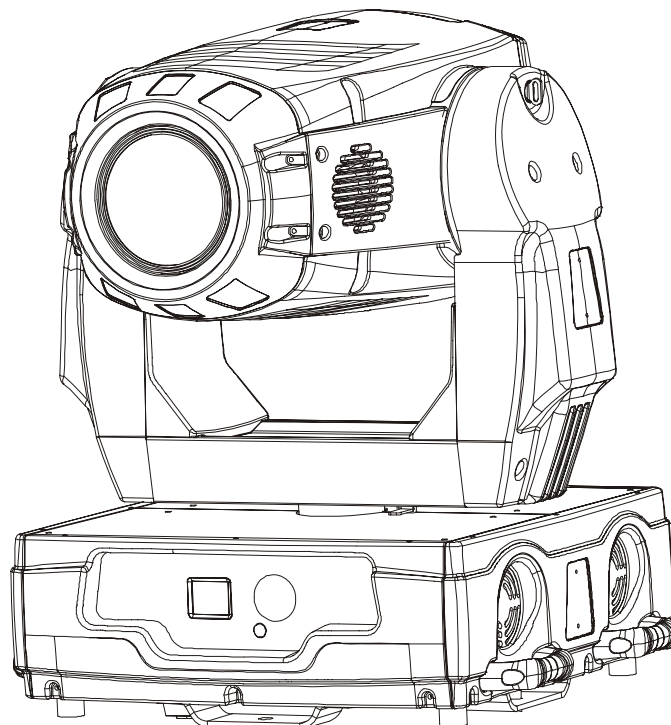




PROFESSIONAL MOVING HEAD USER'S MANUAL

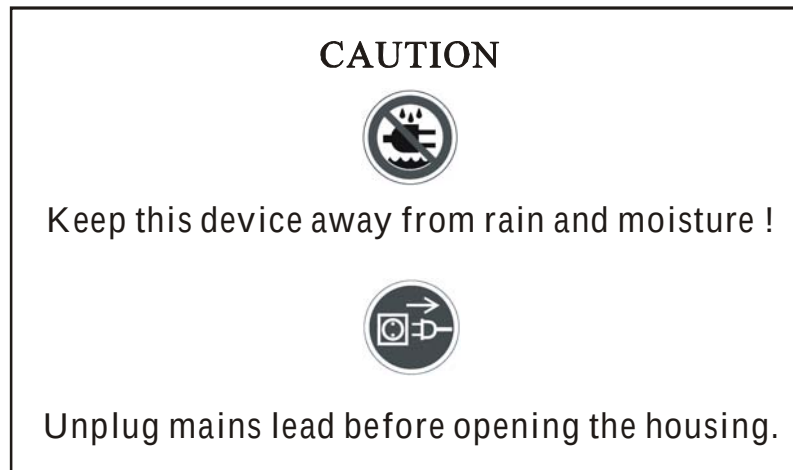
V 1200



KEEP THIS MANUAL FOR FUTURE NEEDS



For your own safety, please read this user manual carefully before installing the device.



Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow carefully the instructions of this manual

INTRODUCTION:

Thank you for having chosen this professional moving head.
You will see you have acquired a powerful and versatile device.

Unpack the device. Inside the box you should find: the fixture device, a power cable, an XLR connection cable, a safety cable and this manual. Please check carefully that there is no damage caused by transportation. Should there be any, consult your dealer and don't install this device.

Features

- pan 540°, tilt 265°
- colors :
 - color wheel1 with 4 dichroic glass panes, 2 correction-filter + 1 UV-filter
 - color wheel2 with 6 dichroic glass panes, for a total of 7 colors
- static gobo wheel has 5 static gobos plus open with different speed gobo shaking
- rotating gobo wheel has 5 rotating gobos plus open, all gobos can be easily replaceable and gobo indexing
- strobe effect : 0~13 flashes per second or random strobe
- Stepless Zoom
- automatic program
- display : digital address and function setting
- High speed pan & tilt movements
- Control board with 4-digit display and foil-keyboard for adjusting the DMX-starting address, Pan/tilt-Reverse, Program, Reset, lamp on/off, operating hours and etc
- digital display can be turn 180° reverse to fit for different installation position local or remote resetting
- lamp switches ON/OFF locally
- auto test for all functions
- value of each DMX-channel can be displayed

- Editable program :
edit and save the program to the incorporated EEPROM through the front control panel or external controller; can save maximum 48 scenes, and run the saved program by the “run” menu from the front control panel

SAFETY INSTRUCTIONS



CAUTION

Be very careful during installation. Since you will be working with a dangerous voltage you can suffer a life-threatening electric shock when touching live wires.

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

IMPORTANT

Damages caused by the disregard of this user manual are not subject to warranty.
The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.



CAUTION

Never touch the device during operation!
The housing may heat up



CAUTION

Never look directly into the light source,
as sensitive persons may suffer an epileptic shock.

Please be aware that damages caused by manual modifications to the device are not subject to warranty. Keep away from children and non-professionals.

GENERAL GUIDELINES

This device is a lighting effect for professional use on stages, in discotheques, theatres, etc. This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in the last page of this manual, the device was designed for indoor use only. Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects. Do not shake the device. Avoid brute force when installing or operating the device.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.

Always fix the fixture with an appropriate safety cable if you use the clamp to hang up the fixture. When fixing the device on a raised-from-the- ground support, be sure to use no less than screws and nuts of M10 x 25 mm and insert them in the pre-arranged screw holes in the base of the fixture.

If you use the quick lock cam in hanging up the fixture, please make sure the 4 quick lock fasteners turned in the quick lock holes correctly.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

Please use the original packaging if the device is to be transported.

For safety reasons, please be aware that all modifications on the device are forbidden.

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, lamp explosion, crash, etc.

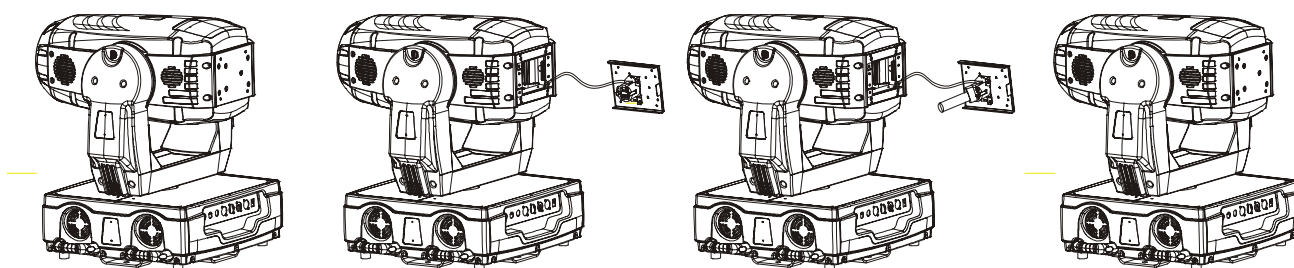
INSTALLATION INSTRUCTIONS

a) Installing or replacing the lamp

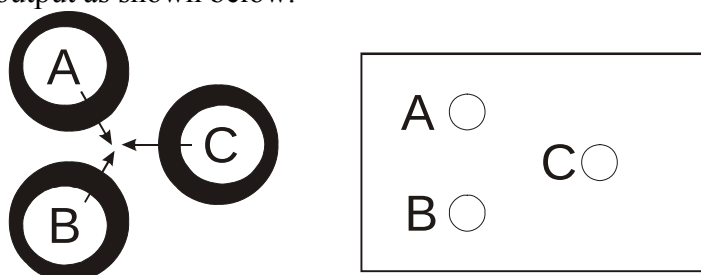
h a higher wattage. They generate higher temperatures than which the device was designed for.
For the installation, you need one

MSR 1200 SA GY 22 lamp ;

Procedure :



- 1) Unscrew the 4 screws marked Y, X, W and Z on the back of the housing, holding the plate where the lamp is underneath.
- 2) Gently pull the socket holder of the lamp housing in the middle.
- 3) Carefully insert the lamp into the socket. Please remember there is only one way to insert the lamp. Gently slide the lamp and its lamp holder back into place and fasten the 4 screws.
- 4) On the access plate there are 3 small screws marked A, B and C. which are used to adjust the lamp holder in the lamp housing. You can adjust the 3 screws to fine-tune the position of the lamp to get the maximum light output as shown below.



Please remember the lamp is not a hot-restrike type, you must wait for approximately 10 minutes after having turned off the lamp before you can turn it back on again.



b) Mounting the device



CAUTION

Please consider the EN 60598-2-17 and the other respective national norms during the installation. The installation must only be carried out by a qualified person.

The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety cable.

Never stand directly below the device when mounting, removing or servicing the fixture.

The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.

These installations have to be approved by a skilled person once a year.



CAUTION

Before taking into operation for the first time, the installation has to be approved by an expert.

Cautions:

The effect should be installed outside areas where persons may reach it, walk by or be seated.



CAUTION

When installing the device, make sure there is no highly inflammable material within a distance of min. 0,5m

Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.



CAUTION

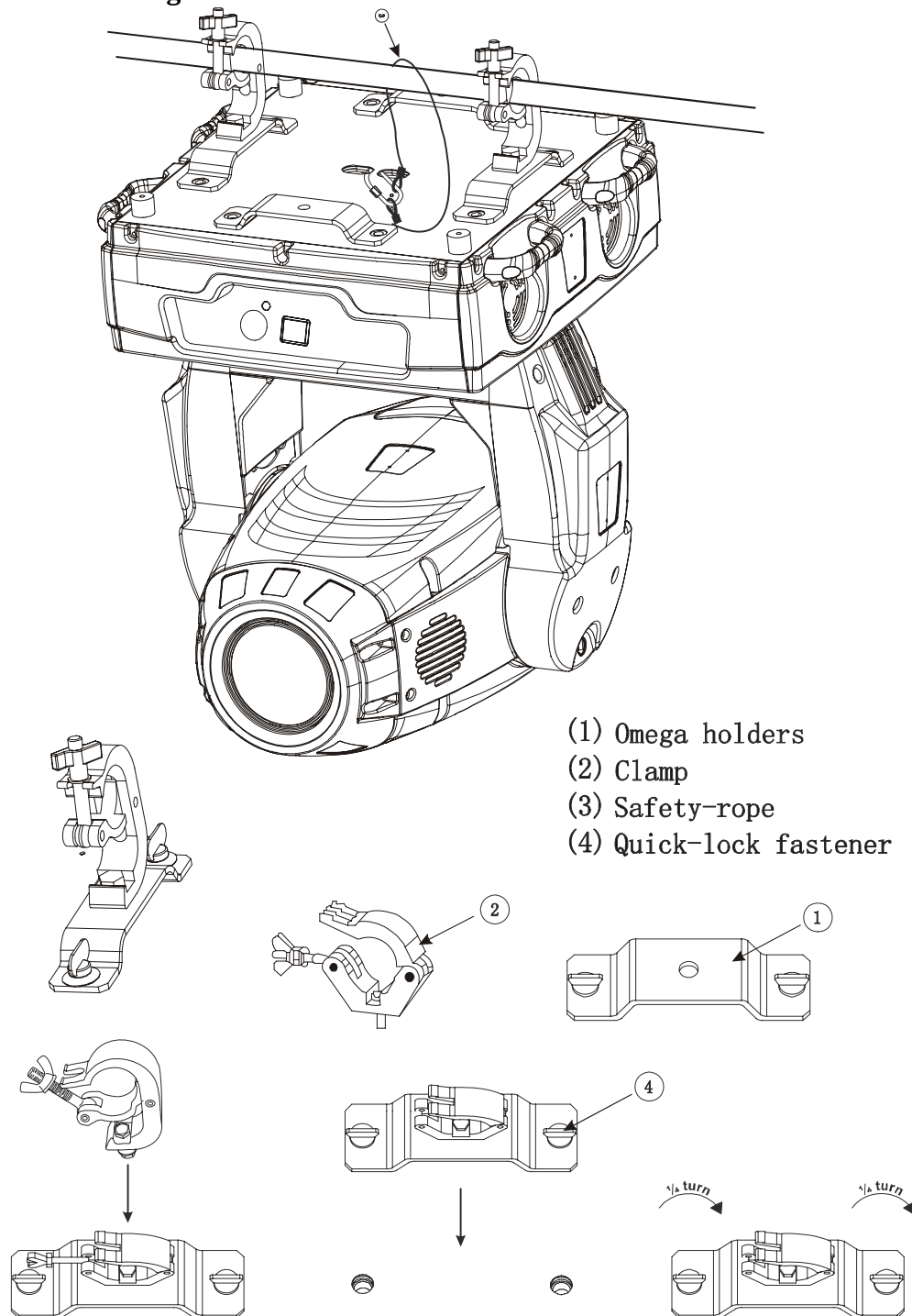
The electric connection must only be carried out by a qualified electrician.

Before mounting make sure that the installation area can hold a minimum point load of 10 times the

device's weight.

Connect the fixture to the mains with the power plug.

installation via the Omega holders



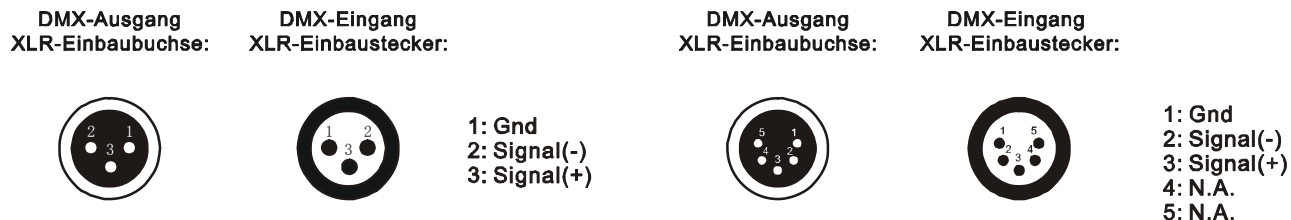
Screw one clamp each via a M12 screw and nut onto the Omega holders.

Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise. Install the second Omega holder.

Pull the safety-rope through the holes on the bottom of the base and over the trussing system or a safe fixation spot. Insert the end in the carabine and tighten the safety screw.

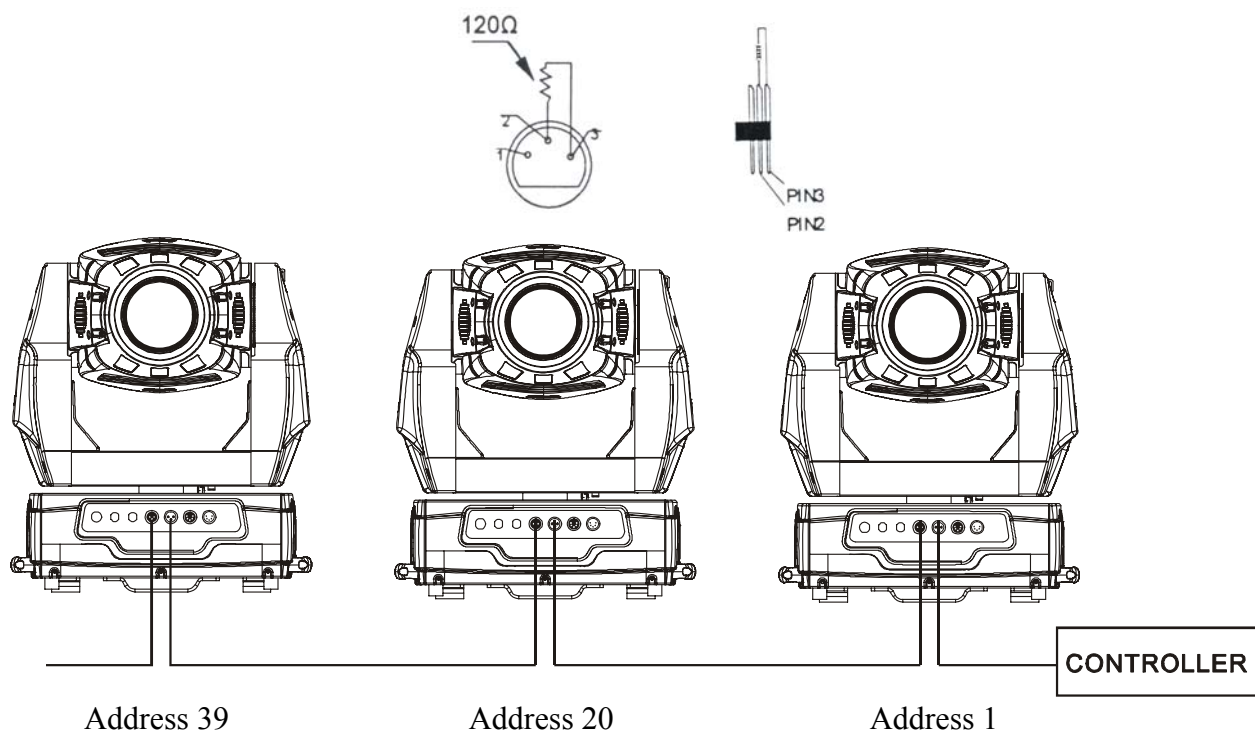
DMX-512 control connection

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.



DMX-512 connection with DMX terminator

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



Projector DMX start address selection

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures , or make different address for each fixture individually.

If you set the same address, all the units will start to “listen” to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to “listen” to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the spot head, which is a 10 channel fixture, you should set the starting address of the first unit to 1, the second unit to 20 ($19 + 1$), the third to 39 ($20 + 19$), and so on.

Note:

After switching on, the machine will automatically detect whether DMX 512 data is received or not. If the data is received, the display will show **"A.001"** with the actually set address. If there is no data received at the DMX-input, the display flashes **"A001"** with the actually set address. This situation can occur if:

- the 3 PIN XLR plug (cable with DMX signal from controller) is not connected with the input of the machine.
- the controller is switched off or defective, if the cable or connector is defective or the signal wires are swap in the input connector.

Control Board

The Control Board offers several features: you can simply set the starting address, switch on and off the lamp, run the pre-programmed program or make a reset.

The main menu is accessed by pressing the Mode/esc-button until the display starts flashing . Browse through the menu by pressing the Up-button. Press the Enter-button in order to select the desired menu. You can change the selection by pressing the Up-button. Confirm every selection by pressing the Enter-button. You can leave every mode by pressing the Mode/esc-button . The functions provided are described in the following sections.

Function Mode	Set DMX address			DMX setting
	Value display			DMX value display
	Set to Slave			Set to slave
	Auto program			Auto program
	Music control			Music control
Information	Time information	Power on time	XXXX	Individual fixture running time
		Machine on time	XXXX	Fixture running time
		Lamp on time	XXXX	Lamp running time
		Lamp off time	XXXX	Lamp closed time
		Clear Lamp time	("Please wait.....")	Clear lamp time
	Temp. Info.	System Temp	XX °C	Ambient time
		Near lamp Temp	XXX°C	Temp in lamp chamber
	Product Info.	Unit model		Unit model
		Unit code		Unit code
		Company WEB		Company WEB
		Company Tel		Company Tel
	Software version	IC01-Ver1.0 ICXX-Ver9.9		Software version of each IC
Personality	Effect Set	Pan Reverse	ON/OFF	Reverse movement
		Tilt Reverse	ON/OFF	
		Blackout moving	ON/OFF	Blackout while pan/tilt moving or color/gobo wheel moving
		Blackout colors	ON/OFF	
		Blackout Gobos	ON/OFF	
		Scan fine select	ON/OFF	
	Status choose	Addr. via DMX	ON/OFF	Add. resetable via DMX Master/ Alnow switch Auto run if no DMX Music control if no DMX
		Master or Alone	Master/Alone	
		Auto if no DMX	ON/OFF	
		Music if no DMX	ON/OFF	
	Lamp control	Lamp on or off	ON/OFF	Lamp on/off Lamp on with power on Lamp on via DMX Lamp off via DMX Lamp off if no DMX Max. lamp on temp. Max lamp off temp.
		Lamp on by power on	ON/OFF	
		Lamp on via DMX	ON/OFF	
		Lamp off via DMX	ON/OFF	
		Lamp off if no DMX	ON/OFF	
		Lamp ignited temp. Max lamp off temp.	XX XX	
	Display set	Display close time	05 M	Display close time LCD brightness
		Display intensity	20~99%	
	Init effect	PAN Moving	PAN Moving=XXX	Initial effect position
		: Save and Active	: ("Please wait.....")	

	Mic sensitivity	0~99%		Sensitivity of Mic.	
	Reset default	ON/OFF			Restore factory settings
Reset function	Reset All Reset Scan Reset Colors Reset Gobos Reset Shutter Reset Others				Reset all motors &return to home Reset only motors for pan/tilt Reset only motors for colors Reset only motors for gobo Reset only motors for shutter and/or dimmer Reset other motors
Effect Adjust	Test channel	PAN Moving			Automatically test the function
	Lamp adjustment	PAN Moving : Save Active	PAN Moving=XXX : ("Please wait.....")		Lamp adjustment
	Wheel adjustment	Color wheel : Save and Active	Color wheel=XXX : ("Please wait.....")		Wheel adjustment
Users Mode Set	User mode	User A settings User B settings User C settings			User's mode
	Preset User mode	PAN : Save and Active	PAN = CH NO.01 : ("Please wait.....")		Preset User modes
Edit Program	Select Programs	Program 1 : Program 10			Select programs to be run
	Edit program	Program 1 : Program 10	Program Test Start step End step	("STEP XX") Start step=xxx End step=xxx	Testing program Program in loop Save and exit
	Edit scenes	Edit Scene 001 ~ Edit Scene 250	Input by outside Save and Active Secne Time ,Pan,Tilt,.....	TIME=X X.XS Pan=xxx,	Save and automatically return manual scenes edit
	Auto scenes Rec.	XX~XX			Automated recording scenes

INSTRUCTIONS ON USE:

DMX channel's functions and their values (19 DMX channels):

Channel 1 - Color Wheel 1:

- 0-13 Open / white
- 14-27 Light blue
- 28-41 Salmon pink
- 42-55 Blue

56-69 Yellow Green
70-83 Light Yellow
84-97 Magenta
98-111 Orange
112-127 Purple
128-187 Forwards rainbow effect from fast to slow
188-193 No rotation
194-255 Backwards rainbow effect from slow to fast

Channel 2 - Rotating gobos, cont. rotation :

0-14 Open
15-29 Rot. gobo 1
30-44 Rot. gobo 2
45-59 Rot. gobo 3
60-74 Rot. gobo 4
75-106 Gobo 1 shake slow to fast
107-138 Gobo 2 shake slow to fast
139-170 Gobo 3 shake slow to fast
171-202 Gobo 4 shake slow to fast
203-255 Rot. gobo wheel cont. rotation slow to fast

Channel 3 - Rotating gobo index, rotating gobo rotation :

0-127 Gobo indexing
128-187 Forwards gobo rotation from fast to slow
188-193 No rotation
194-255 Backwards gobo rotation from slow to fast

Channel 4 - Fixed Gobos :

0-14 Open
15-29 Fix gobo 1
30-44 Fix gobo 2
45-59 Fix gobo 3
60-74 Fix gobo 4
75-89 Fix gobo 5
90-113 Gobo 1 shake slow to fast
114-137 Gobo 2 shake slow to fast
138-161 Gobo 3 shake slow to fast
162-185 Gobo 4 shake slow to fast
186-209 Gobo 5 shake slow to fast
210-255 Fix gobo wheel cont. rotation slow to fast

Channel 5 - PAN movement 8bit :

Channel 6 - TILT movement 8bit :

Channel 7 - Speed pan/tilt movement:

0-14	max speed
15-225	max to min speed
226-235	blackout by movement
236-245	blackout by all wheel changing
246-255	no function

Channel 8 - prism/prisms macros:

0-25	open
26-51	3 facet prism
52-77	5 facet prism
78-103	7 facet prism
104-127	trapezoid prism
128-135	Macro 1
136-143	Macro 2
144-151	Macro 3
152-159	Macro 4
160-167	Macro 5
168-175	Macro 6
176-183	Macro 7
184-191	Macro 8
192-199	Macro 9
200-207	Macro 10
208-215	Macro 11
216-223	Macro 12
224-231	Macro 13
232-239	Macro 14
240-247	Macro 15
248-255	Macro 16

Channel 9 - Rotating prism index, rotating prism rotation :

0-127	Prism indexing
128-187	Forwards Prism rotation from fast to slow
188-193	No rotation
194-255	Backwards Prism rotation from slow to fast

Channel 10 - Shutter, strobe:

0-31	Shutter closed
32-63	Dimmer control (shutter open)

64-95 Strobe effect slow to fast
96-127 No function (shutter open)
128-159 Pulse-effect in sequences
160-191 No function (shutter open)
192-223 Random strobe effect slow to fast
224-255 No function (shutter open)

Channel 11 - Dimmer (intensity):

0-255 Intensity 0-100%

Channel 12 – Focus:

0-255 Continuous adjustment from far to near

Channel 13- Zoom:

0-63 Zoom 1
64-127 Zoom 2
128-191 Zoom 3
192-255 Zoom 4

Channel 14 – Iris:

0-191 Max. diameter to Min.diameter
192-223 Pulse closing fast to slow
224-255 Pulse opening slow to fast

Channel 15 - Color Wheel 2 :

0-13 Open / white
14-27 Red
28-41 Light blue
42-55 Pink
56-69 Dark Yellow
70-83 3200K correction filters
84-97 5600K correction filters
98-111 UV-filter
112-127 Green
128-187 Forwards rainbow effect from fast to slow
188-193 No rotation
194-255 Backwards rainbow effect from slow to fast

Channel 16 –Frost

0-191 Frost 0~100%
192-223 Pulse opening fast to slow
224-255 Pulse closing slow to fast

Channel 17 – Lamp on/off, reset, internal programs:

0-19	colour change normal by direction depend on distance
20-39	colour change to any position by direction depend on distance
40-59	Lamp on
60-79	Lamp switch off
80-99	Motor reset
100-119	Internal program 1
120-139	Internal program 2
140-159	Internal program 3
160-179	Internal program 4
180-199	Internal program 5
200-219	Internal program 6
220-239	Internal program 7
240-255	Internal program 8

Channel 18 – Pan fine 16bit

Channel 19 – Tilt fine 16bit

ERROR MESSAGE

When you turn on the fixture, it will make a reset first. The display may show “XXEr” while there are problems with one or more channels. “XX” stands for channel 1,2,3,5,6,7 who has the testing sensor for positioning .

For example, when the display shows “02Er”, it means there is some error in channel 2. If there are some errors on channel 1, channel 2, channel 5 at the same time, you may see the error message “01Er”, “02Er”, “05Er” flash repeated for 5 times, and then the fixture will generate a reset signal, all the stepper reset. If the fixture remain error message after performing reset more than 3 times, it will detect whether the fixture has more than 3 errors. If the fixture has more than 3 errors (including 3 errors), all the channels can not work properly; but if the fixture has less than 3 errors, only the channels which have errors can not work properly, others can work as usual.

01Er:

(Color-wheel error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its drive circuit on the main PCB). The color wheel is not located in the default position after the reset.

02Er:

(Rotating gobo-wheel error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunctions(sensor failed or magnet missing) or the stepping-motor is defective (or its drive circuit on the main PCB). The rotating gobo-wheel is not located in the default position after the reset.

03Er

(Rotating gobo indexing error) This message will appear after the reset of the fixture and if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driver circuit on the main PCB). The rotating gobo is not located in the default position after the reset.

04Er

(Static gobo-wheel error) This message will appear after the reset of the fixture if the yoke’s magnetic-indexing

circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Static gobo-wheel error is not located in the default position after the reset.

05Er

(PAN-yoke movement error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The PAN-yoke is not located in the default position after the reset.

06Er:

(TILT-head movement error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The TILT-head is not located in the default position after the reset.

08Er

(Prism-wheel error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Prism-wheel is not located in the default position after the reset.

09Er

(prism indexing error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The prism indexing is not located in the default position after the reset.

12Er

(Focus error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Focus is not located in the default position after the reset.

13Er

(Zoom error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Zoom is not located in the default position after the reset.

14Er

(Iris error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Iris is not located in the default position after the reset.

15Er

(Color-wheel2 error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (sensor failed or magnet missing) or the stepping-motor is defective (or its driving IC on the main PCB). The Color-wheel is not located in the default position after the reset.

CLEANING AND MAINTENANCE

The following points have to be considered during the inspection:

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
 - 2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
 - 1) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
 - 2) The electric power supply cables must not show any damage, material fatigue or sediments.
- Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



CAUTION

Disconnect from mains before starting maintenance operation.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device except for the lamp. Please refer to the instructions under “Installation instructions”.

Should you need any spare parts, please order genuine parts from your local dealer.

TECHNICAL SPECIFICATIONS

Power supply :

☐ 208VAC,50Hz; ☐ 220VAC,50Hz; ☐ 230VAC,50Hz; ☐ 240VAC,50Hz;

☐ 208VAC,60Hz; ☐ 220VAC,60Hz; ☐ 230VAC,60Hz; ☐ 240VAC,60Hz;

Power consumption : max. 1500 W:

Lamp : MSR 1200 SA GY 22 socket, Metal Halide;

Motors : 16 micro motors

Flight case dimensions : 65 x 60 x 72 cm

Net weight : 58 KGS;

Gross weight: 63 KGS (Carton packing) 98 KGS (Flight case packing);

Remark : errors and omissions for every information given in this manual excepted. All information is subject to change without prior notice.